

Running head: AN ANALYSIS OF PERSONALITY TYPING AND INCIDENT  
MANAGEMENT TEAMS

Executive Development

An Analysis of Personality Typing and Incident Management Teams

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September 2006

*Appendix C Not Included. Please visit the Learning Resource Center on the Web at <http://www.lrc.dhs.gov/> to learn how to obtain this report in its entirety through Interlibrary Loan.*

### **CERTIFICATION STATEMENT**

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Leigh A. Bedrich

### Abstract

The Flower Mound Fire Department has the need to select and train positions for local Incident Management Teams (IMTs). A personality assessment may effectively streamline and contribute to this process. Using the evaluative method, research included literature review and a directed survey. Questions reviewed the types of assessment tools available, the potential match to known abilities of IMT positions, a possible correlation between team members and personality, and the tool's promise for selection. The research supported the possibility of using the Myers-Briggs Type Indicator (MBTI) for IMT self-selection and training.

Recommendations include expanding the survey scale and professionally administering the MBTI to evaluate the potential for use by agencies of any size to select and develop the best possible IMT.

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## An Analysis of Personality Typing and Incident Management Teams

Flower Mound, Texas is a commuter suburb that is located in the Dallas/Fort Worth metroplex just north of the Dallas Fort Worth International Airport. Flower Mound is located primarily in Denton County, but also has response areas in Tarrant and Dallas Counties covering a total of 43 square miles. The estimated population for 2006 is 61,660 according to the North Central Texas Council of Governments (NCTCOG, 2006). This is a young, affluent community, with a median age of 34 and a median family income of \$74,000.00, with over 61% of the adults having advanced degrees (S. Mitchell, personal communication, June 7, 2006).

The Flower Mound Fire Department (FMFD) is an all-hazard response agency that participates heavily in regional initiatives for fire and EMS planning. The department has 70 professional firefighters, staffing three stations with 10 pieces of apparatus including three Mobile Intensive Care Unit (MICU) ambulances (S. Mitchell, personal communications, June 7, 2006). Ninety percent of the response staff are paramedics; other specially trained personnel include certified SWAT medics, hazmat technicians, investigators and fire safety educators (S. Mitchell).

A management lean organization, the FMFD has a fire chief, two assistant chiefs and two battalion chiefs (BCs). There are no shift BCs; a captain at each station on each shift share duties as the shift officer, with the two BCs managing Training and Fire Marshall duties. There are only three full time administrative staff members (S. Mitchell, personal communication, June 7, 2006).

The Town of Flower Mound has a well organized and drilled Emergency Operations Center (EOC), with the Emergency Management Coordinator a degreed but part time employee of the Fire Department. However there are not enough experienced personnel to function in an

expanded Incident Management Team (IMT) for even a Level 5 incident without impacting on-duty staffing. Relying heavily on mutual aid to protect the response area in a large event, FMFD would also have to use this mutual aid to cover IMT positions in an extended incident. In fact, most Denton County fire departments would need assistance for any incident beyond one operational period. To address this regional issue, Denton County fire department chief officers including Flower Mound are working on a card system to credential personnel for this purpose. This project is in its earliest stages, so the opportunity to create an effective regional team is now. Suffering through the first stages of organization, it may be quite some time before this team is organized and trained as an effective unit.

The Flower Mound Fire Department could implement selection criteria and training for a limited IMT fairly quickly, and then these personnel would be considered for credentialing at the regional level. This solution would likely include the selection and development of lower level officers and non-supervisors from the department and perhaps city personnel for these positions. Without specific criteria for selection, this would be an instinctive choice at best. If the team members do not work out, it can be especially hard to move these persons out of volunteer positions and back “off the bus” (p. 32), as Collins (2005) puts it in *From Good to Great in the Social Sector*.

From personal observation that specific personalities seem to gravitate to certain roles within an IMT, the question became whether there was enough correlation in any readily available personality trait test for its use as part of the selection process for team members. The evaluative method of research was used for the development of this ARP. The research methodologies will consist of literary review, a directed survey instrument and interviews.



This ARP sought to answer several questions. What personality trait assessment tools are available to type fire department personnel? Are any of the traits within a tool selectively matched to known abilities for the IMT General and Command Staff positions by experienced IMT members? Is there a correlation between personnel that are credentialed for certain positions and personality traits? Finally, what potential exists for the use of personality traits as a selection tool for IMT members?

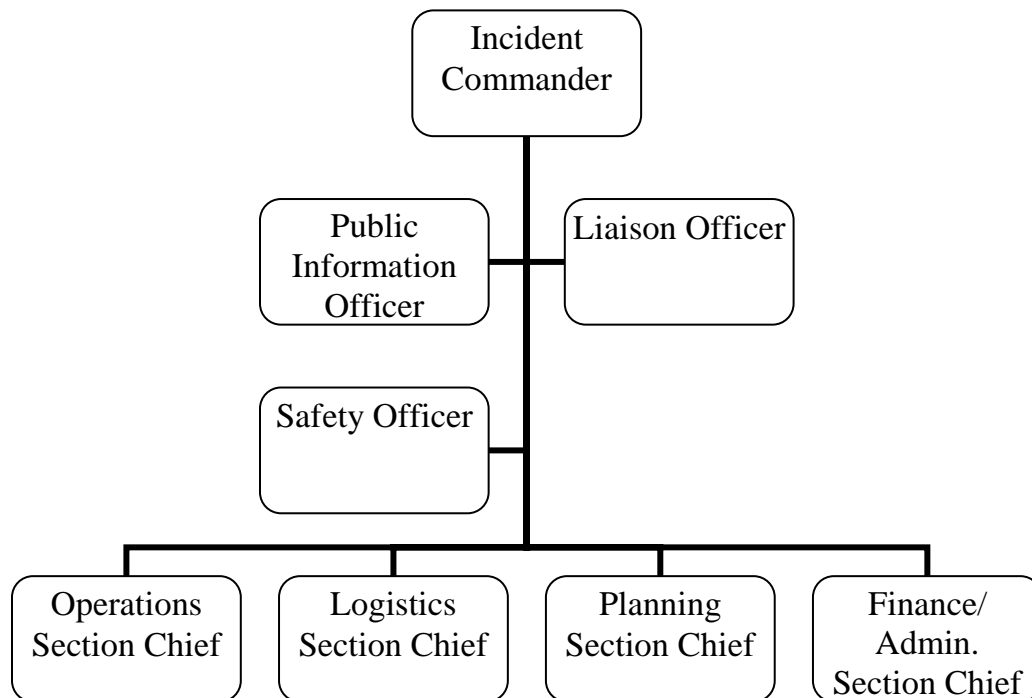
## Background and Significance

While not always called such, Incident Management Teams (IMTs) have been around for several decades in the fire service. Born from the wildland fire community, IMTs were developed and refined over years of implementation and subsequent after action review (United States Fire Administration [USFA], n.d). From the perspective of the USFA, an IMT is made up of the General and Command Staff of an EOC (Emergency Operations Center) (USFA, n.d.). An IMT is an all-hazard team of personnel who are pre-designated and credentialed through training and experience by the coordinating agency of the team (USFA).

In August 2003, a focus group of experts and stakeholders were gathered in response to a Memorandum of Understanding between the United States Fire Administration (USFA), the International Association of Fire Chiefs (IAFC) and the National Fire Protection Administration (NFPA) Metro Chiefs (USFA, n.d). This group met to determine a framework for the development of IMTs across the country. The USFA serves as the lead agency due to the historic leadership of the fire service as well as the reality that many IMTs will be developed by the fire department as the lead all-hazard response agency for incidents (USFA). However the program is designed to prepare and include all response agencies that could be a part of the operational setting in a high-profile interagency incident, completely compliant with the National Incident Management System (NIMS) (USFA).

One of the main advantages to a group planning the implementation of these IMTs is that training can be provided to the team as a whole, using regionally specific information, so that the team on completion can function immediately at an appropriate level (USFA, n.d.). For the Town of Flower Mound and its mutual aid departments, this appropriate level would be a Type 5 IMT. The Type 5 team is for a local village or town team, with a pool of what are usually fire

officials trained to fill General and Command Staff positions during the first six to twelve hours of a major or complex local incident (USFA). The General Staff positions of an IMT are the Incident Commander, the Operations Section Chief, the Logistics Section Chief, the Planning Section Chief and the Finance Section Chief (FIREScope, 2004, p. 19.8). The Command Staff in an IMT includes the Liaison Officer, the Public Information Officer (PIO) and the Safety Officer (p. 19.5).



*Figure 1.* Organizational chart depiction of the reporting relationships in an Incident Management Team (IMT) (FIREScope, 2004).

The Town would also likely participate in a county-wide Type 4 IMT; this team would also probably also include EMS and maybe law enforcement activated to manage a major or complex incident for a county or city jurisdictional incident for the same period as a Type 5 team (USFA, n.d.). The Type 4 team could also be expected to transition to a Type 3 IMT, fulfilling a state or Department of Homeland Security (DHS) Urban Area Security Initiative (UASI) region

needs for an IMT to cover an incident beyond one operational period as determined by state guidelines.

Type 2 and Type 1 IMTs are federally or state certified, and both can respond to national and state incidents (USFA, n.d.). The difference between them is Type 1 teams have more experience for large and complex incidents, and are “fully equipped and self-contained” (USFA); both are operated through the U.S. Forest Service. In 2003, there were sixteen Type 1 and several dozen Type 2 teams around the country.

Based on the definition of these teams, the Flower Mound Fire Department and its mutual aid partners should begin the process of selection, training and credentialing personnel for Type 4 and 5 teams. Flower Mound would be responsible for community incidents for at least six to twelve hours and the most effective and efficient team would be one that is selected specifically for this task. At this level, the criterion is the responsibility of the lead agency, and the most likely current scenario is that personnel would be assigned positions based upon the experience and intuition of the Incident Commander. However without changing how operations would function at the scene, it could be supported significantly and seamlessly with specifically trained, pre-designated General and Command Staff.

Fire service personnel, like in other industries, are not hired or selected for promotion by just experience and intuition; employers are more frequently using personality tests. While these tests are not good as the sole criterion for hiring selection (Antonellis, 2006), they are very useful for determining the fit of a person within a specific position (Evans, 2004). The success of all teams depends on the team member’s attitude toward the job as well as their ability to communicate with other team members.

On the application for Southern Area Interagency Type 1 and 2 IMTs, some of the attributes sought of the applicants include that they are “motivated specialists” (Southern Area Multi-Agency Coordinating Group [SAMCG], 2005), they can “lead, manage, or function as a member of a diverse team” (Application, p. 2), and their demonstration of the abilities to manage sensitive situations and communicate effectively. There is consistent agreement that there is a strong link between personality and the brain function that characterizes these desired attributes (Pepper, 2005). This is just the tip of a bigger question of what makes someone more suited to one task than to others (Pepper). Some researchers think that personality tests can provide that answer.

This applied research pulled together information about commonly available personality assessment tools, and the theoretical application of those tools to assist in the selection or assignment of members to IMTs using survey input from experienced team members with tool interpretation literature. The analysis of this theory supports the framework for executive decisions regarding the Flower Mound Fire Department’s involvement in emergency management, so is a relevant contribution to the Executive Analysis of Fire Service Operations in Emergency Management course in the Executive Fire Officer Program. Finding the most effective team members for IMTs strongly supports the United States Fire Administration (USFA) objective to reduce loss of life for firefighters (USFA, 2003). In addition, it supports a community-wide risk reduction plan with its mitigation potential for larger or extended incidents, and concretely supports a current emerging issue in the fire service (USFA).

### Literature Review

Published information related to personality testing and its use for position selection or career guidance was reviewed, particularly as applied to the fire service. Additional evaluation

included background information about the responsibilities of General and Command Staff of IMTs. This information along with personal interviews provided conditions for the development of a survey tool. The literature review also supported the understanding and interpretation of the Myers-Briggs personality types, selected for use in the survey and subsequent analysis of results.

#### *Personality Tests for Team/Role Selection*

In a world where human resource decisions are carefully regulated and scrutinized, employers look for any tool that can simplify what may be an overwhelming process. Because the firefighting profession is viewed positively by the public, there are situations where hundreds of applicants will submit themselves to a barrage of tests for a handful of jobs (Booth, 1999). Booth asserts that this leaves fire organizations with only three options: staying the course similar to the last 20 years using written and physical-ability testing (low costs, but potential court challenges and an organization without diversity), use of an assessment center even for hundreds of applicants (expensive, but known to provide top and diverse recruits) or combine the assessment process with a higher bar for applicants (including upper education requirements). It is clear that higher educational standards are applicable and defensible in the fire service, much more so than experience standards (Booth).

One way to increase the validity of an interview or assessment process is to consider personality testing as a way to focus on the most insightful questions for a candidate, eliciting a smaller pool of the best possible hires (Stafford, 2005). There has also been a strong connection demonstrated between brain function and personality (Pepper, 2005). Others feel personality testing is an “efficiency tool” (Bosshardt in Stafford, 2005, para. 4) for the company to improve the odds that an applicant will be the right “fit” (Bosshardt) for a job. Cramer (2006) thinks that psychometric tests “flourished because it appears to be a means to a desired end” (p. 22).

While some professionals believe that personality is a “moving target” (Hsu, 2004, para. 2), other performance consultants such as Putzier think it is valuable because it can reveal what may be considered a weakness to be a strength (Putzier in Hsu, 2004). Putzier continues specifically that “someone who is analytical and likes to work by themselves all day might be a great...planner, or accountant” (para. 5). Riddle (2006) believes that there is utility in specific identification for personality in the workplace; as an example, knowing that some of the participants in the meeting you are planning will want to mull over topics for discussion before participation, the personality aware manager will know to publish a meeting agenda in advance for those attendees.

Antonellis (2006) echoes this idea of personality as an important “ingredient” (para. 1) for firefighter performance. It is so crucial because personality traits “play a significant role when interacting with people” (para. 1). He agrees with many of the above cited authors that this testing should only be a part of the puzzle of selection (Hsu, 2004; see also Booth, 1999; Evans, 2004). Overholt (2004) goes on to state that different roles will better suit individuals based on their dominate personality themes. In addition, knowing what personality types are in the high performers allows an employer to “replicate” (para. 7) that in the candidates for those positions.

### *Types and Relevance of Tests*

So what tests would best determine which personal traits are hardwired in a person? Because personality is such a key component of role stability in the fire service, tests that dig into personality should be helpful. Antonellis (2006) suggests that the close interaction occurring in the fire service favors personnel that are “trusting, cooperative, dependable and determined” (para. 9). However there are traits that can be of benefit to a group, but a liability to a team, such as assertiveness, an upbeat attitude and a tendency to be talkative (para. 10). This

author also proposes that firefighting is more than a job; “it’s who they are” (para. 14). Because of this strong identity to the job, firefighters are dedicated people looking for challenges to push them, and tend to be drawn toward “risky behavior” (para.15) off duty as well. Recognition of this type of personality as being risky to the employee should be recognized as being typical for many in the profession.

Other typical personality traits for firefighters include an attitude that prohibits them from quitting as well as a strong desire to help people (Antonellis, 2006, para. 13, 15). These traits, along finding better but different ways to do a task, being stimulated by their activities and to “tinker” (para. 18) are all typical and may help them be better firefighters. But these same characteristics may also bring them into the Chief’s office with personnel issues (para. 18-19). A tool that helps an administrator use a different lens to see their employee will be better able to ensure they match that person in positions where they will “naturally shine” (Overholt, 2004, para. 6; see also Antonellis, 2006). Cramer (2006) also adds that “people who understand and appreciate each other will accomplish more” (p. 22). This literature all supports the idea that personality assessment in the fire service has the same potential that it does in the general population.

Of the 150 or more personality tests available, the Myers-Briggs Type Indicator (MBTI) is one of the most widely used and accepted (Evans, 2004; Stafford, 2005). The MBTI was developed during World War II, with the Briggs Myers Type Indicator Handbook published in 1944; this was changed to Myers-Briggs Type Indicator in 1956 (Myers-Briggs Type Index [T.I.], n.d). Isabel Briggs Myers stated that “the understanding of type can make ... your life closer to your heart’s desire” (Myers & Briggs, n.d.). On the official Myers & Briggs Foundation website, it is explained that personality typing can assist an individual with



advancing in an organization or even a career change. One very successful use is that typing can help a person understand what makes them comfortable or uncomfortable on a job. It is this promise that has 89 of the Fortune 100 companies (para. 6) using Myers-Briggs for human resource decisions such as hiring and promotion (Pepper, 2005).

Skeptics of MBTI state that it can lack validity and could be an example of the Forer Effect, when an individual makes choices in a test in an attempt to present their type in the most favorable light (MBTI, n.d.); however if it is a well-designed test there will be buffers to prevent that from occurring (Overholt, 2004). Others feel that in an attempt to simplify the explanation of this test, its application is also made overly simplistic and some cite many tests are little more than “snake oil” (Hogan in Stafford, 2005, para. 29; see also Overholt, 2004). Cramer (2006) points out the irony in the fact that many organizations exalt the virtues of diversity, but now want to only use sixteen personality labels to categorize their employees (p. 22).

While there is disagreement on validity for selection, there is fairly consistent support for use of the MBTI to help an individual understand their personality related preferences (Stafford, 2005; see also Hsu, 2004; Myers & Briggs, n.d.; Myers-Briggs TI, n.d.; Overholt, 2004). Riddle (2006), in a letter disagreeing with Cramer (2006), feels that another positive is that instead of the “us vs. them” or “nice vs. mean” “binary scheme” (p. 12) of classifying co-workers, employees are shown that there are a number of acceptable variables to “normal” (p. 12).

But Riddle (2006) agrees with others that there is strong advice that personality tests in the workplace should be subject to ground rules that protect the individual. These include obtaining written informed consent from the applicant, explaining what the intent is of administering the tool and keeping the scores confidential from the co-workers and the employee’s manager (Schmitt, 2006; see also Overholt, 2004; Stafford, 2005). Additionally,

facilitators are required to use the term “best-fit types” (MBTI, n.d., para. 5) for explaining the types, stating that always the individual taking the indicator is the best judge of what their preferences are. Riddle thinks that additionally facilitators should always include a limiting statement with the description that cautions “under [these] circumstances” (p. 12).

Another common test to be considered is the Minnesota Multiphasic Personality Inventory (MMPI) (Evans, 2004; see also Antonellis, 2006). While commonly used in public safety agencies, including up to 60% of police departments (Pepper, 2005, para. 7), the MMPI and its 567 questions is designed to help determine an individual’s mental health by identifying paranoia, depression, mania or anxiety (Antonellis). Another author states that it was developed to ferret out substance abuse and other symptoms of “social maladjustment” (Pepper, para. 7). With translations into 100 other languages, it appeals to “alarmists” (para. 8) in hiring organizations.

The infamous Rorschach inkblot test is still used in one third of emotional-injury lawsuits in the United States and by almost half of psychologists providing evaluations for child custody cases (Pepper, 2005, para. 7). But like the MMPI, it can find false/positive evidence of mental illness (Pepper). The Neuroticism, Extroversion and Openness (NEO) Personality Inventory looks at only five categories to assess a normal personality, unlike the MMPI and Rorschach but in a subtler way than the MBTI (Pepper). There are also tests geared toward specific objectives rather than a broad personality assessment. Some of these include an Occupational Personality Questionnaire and compatibility indices like the 436 question survey on eHarmony.com (Hsu, 2004; Pepper, 2005).

The eHarmony compatibility test is more famous than some of the others, but it is just one of the tests in this \$400 million-a-year industry that supports personality testing for one use

or another by about 30% of all companies (Stafford, 2005). All of these potential choices can be overwhelming; however the Myers-Briggs Type Index is the clear match for this applied research. The MBTI is given frequently in leadership development programs, and there are also free informal evaluations on the internet. Additionally it is a test easily adapted to a survey for input by both those who knew their type, and those who did not (Overholt, 2004). And there was linkage between the desired personality traits of public safety personnel and the MBTI results (Antonellis, 2006; Cramer, 2006; Overholt, 2004).

### *MBTI Expanded*

Based on popularity and availability, the current standard for psychometrics is the MBTI (Evans, 2004; Stafford, 2005). Test subjects answer questions about their tendencies of behavior and receive a classification of “type” (Pepper, 2005, para. 2) from four dichotomies or opposing and mutually exclusive groups: introversion/extroversion, sensing/intuition, thinking/feeling and judging/perceiving.

Introversion and Extroversion are referred to by the MBTI developers as “attitudes” (MBTI, n.d., para. 5), describing how a person orients and receives their energy. The Extrovert directs energy outwardly and is energized by interaction with the world around them and those in it; the Introvert directs energy inward and is energized by inward reflection and time alone (MBTI).

Sensing and Intuition are the “perceiving” (MBTI, n.d., para. 6) functions. This refers to a person’s preference for receiving data. This may not appear rational, as a person can not always control how they receive data, but they can control how they process it. The Sensing type pays attention to details and current realities, preferring to receive information from their

five senses. The Intuition type prefers to receive their data more in a subconscious way, using insight to pay attention to meanings, patterns and future possibilities (MBTI).

Thinking and Feeling are “judging functions” (MBTI, n.d., para. 7). Both types try to make rational decisions using the preferred perceiving method above (Sensing or Intuition). However Thinking types choose based on principles and logical consequences, such as “true-false” or “if-then” (para. 7) connections. Feeling types choose based on values and consequences for people, using “more or less, better-worse” (para. 7) evaluations. If the individual is an Extrovert, the Thinking/Feeling decision judgments are based more on external sources and acknowledged rules and procedures. If they are an Introvert, these judgments are more subjective as they will use internally developed ideas for evaluation (MBTI).

Judging and Perceiving are the most complex pairing, and can reveal the specific attitude for all of the functions (MBTI, n.d., para. 8). These interpretations are based on complex relationships where a Judging type that is also with an extroverted judging function (Thinking/Feeling), but the preferred perceiving function (Sensing/Intuition) is introverted. In Perceiving types, the converse is true, where the perceiving function is extroverted with the judging function introverted. The simple approach to Judging/Perceiving is that the Judging type likes to come to conclusions quickly and enjoys the structure of reaching closure, and the Perceiving type likes to take more time to gather information, enjoy the process and is comfortable with something remaining open-ended (MBTI).

Some feel that the MBTI oversimplifies typing, stating people are more than just types and are generally “blends” (Pepper, 2005, para 6). Other think that the fact of someone who is extreme on one end of a pairing is “lumped” (MBTI, 2006, sect. 8, para. 8) with someone who is very close to a balance in an attribute is additional evidence of MBTI ineffectiveness.

In fact many other tests attempt to blur the neat categories of the MBTI and are adaptations of this test, with variables that provide slightly different labels or organization of the MBTI basic sixteen combinations. There is the Keirsey Temperament Sorter, which is frequently given out as a Myers-Briggs “test” (Keirsey, n.d., para. 4); Keirsey used a systems model to characterize patterns of both temperament and character over the long term to try to identify what people do. Myers-Briggs, in contrast, has been described as simplifying the work of Karl Jung into a tool giving individuals insight into what they have in their mind as preferences (Keirsey). Myers-Briggs uses the Introvert/Extrovert scale as the most dominant pairing, while Keirsey views the Intuitive/Sensing pair as the primary sorter (Keirsey).

Another use of the sixteen types are the sixteen “learning styles” (Paragon, n.d., Heading) of the Paragon Learning Style Inventory. Because much of the work related to these sixteen descriptions crosses over, “labels” (Keirsey, n.d.) attached to the sixteen types, temperaments or styles may be noted for analysis in this project. “Types” (MBTI, n.d., para. 1) will be used as a consistent label for the sixteen combinations, independent of the source of the description.

Table 1 looks at the four pairs to assess the sixteen possible type combinations; the content is from the first two columns of Appendix A that includes descriptions of all sixteen types (MBTI, n.d.; Personality, n.d.).

Table 1

*Personality Type with Profile Labels*

Type	Profile labels
ISTJ	Duty Fulfillers, Trustee, Inspectors
ESTJ	Guardians, Administrator
ISFJ	Nurturers, Conservator

ESFJ	Caregivers, Vendor
ISTP	Mechanics, Expeditor
ESTP	Doers, Promoters
ESFP	Performers, Entertainer
ISFP	Artists
ENTJ	Executives, Field Marshall
INTJ	Scientists
ENTP	Visionaries, Inventor
INTP	Thinkers, Architect
ENFJ	Givers, Pedagogue
INFJ	Protectors, Author
ENFP	Inspirers, Journalist
INFP	Idealists, Questor

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*Note.* Content condensed from Appendix A.

These labels provide a variety of mental images for different personality types (Appendix A.). Putting a name on a set of letters brings to mind a vision of someone that resembles that type. Most people know someone that likes to take things apart to see how they work: this resembles the Mechanic/Expeditor that is the ISTP (Appendix A). The same tendencies displayed by an extroverted person characterize the Doer/Promoter that is an ESTP (Appendix A).

#### *Roles and Role Matching*

Another way of looking at the type labels in Table 1 are as roles in society. In the work place, labeling people or name calling is common (Kroege, Thuesen & Rutledge, 1991). It may

not be called that, but it is that practice from childhood that helps people begin to understand the differences in the personalities around them (Kroeger et al.). People may deny that they do this because it can be seen as not politically correct; however it is frequently found.

Calling this “typewatching” (Kroeger et al., 1991, para. 8) rather than name calling transitions this tendency of people to a more constructive response. Riddle (2006) even states that rather than the source of stereotyping, MBTI typing may actually reduce it by pointing out the variety of acceptable ways of differentiating normal individuals (p. 12). This may also promote the tendency to tag someone with an identifying trait that can be fun as well as useful in a variety of situations (Kroeger et al., 2006). This natural behavior can support the concept of IMTs that require them to rely heavily on other people and be tuned in to their needs, preferences and styles. IMTs are characterized by teamwork as well as motivated and cooperative employees (FIREScope, 2004; SAMCG, 2005). Typewatching is one effective way to help understand those around the task at hand (Kroeger et al., 2006; Riddle, 2006).

Edwards (2003), a resume writer and coach, supports the use of assessments to help individuals find the best match for their career. The MBTI is strongly encouraged as a tool to assist an individual match their personality type with professions that are prevalent and good matches for each of the sixteen profiles (Myers & Briggs, n.d.). Qualities desired in firefighters such as work ethic, motivation to learn, ability to work in teams and the ability to get along with others are all assessable to some degree by the MBTI (Booth, 1999; see also Edwards, 2003; MBTI, n.d.). Employees who like their jobs are also more fulfilled, making their selection a better return on investment (Edwards, 2003; see also Overholt, 2004; Stafford, 2005). Placing someone in the right role, what Disney calls “casting” (2006, *Life at Disney*) means success for the individual and success for the department; a definite win-win.

There is research support for success when role matching. The right psychometric test, when compared to written application forms and most interviews and references, is better at predicting a candidates' chance of success in a role (Bakker, 2000; see also Antonellis, 2006; Evans, 2004). While the question of the right personality for any job can be difficult to determine in some professions, there may be fairly clear consensus in the fire service as to general characteristics (Bakker, and Evans, Antonellis). Also called tests of "typical performance" (Bakker, 2000, para 8), they are useful because they show some prediction of what an applicant is likely or would prefer to do. Continuing to label personality as a "preference" (MBTI, n.d.) again here shows that these are not a hard and fast crystal ball, but flexible indicators of tendencies (Bakker, 2000; see also Pepper, 2005).

#### *Summary of Literature Review*

Quoted in Pepper (2005), Carl Jung stated that "personality...is an act of high courage flung in the face of life" (para. 15), certainly an endorsement of the consideration of personality as a decision tool for human capital decisions in the fire service. Antonellis (2006) discussed personality specifically as related to the fire profession; because this profession admittedly appears to demonstrate strong personality types, it seems especially suited to using that knowledge for an appropriate use (Antonellis; see also Cramer, 2006; Overholt, 2004).

A variety of authors, including Evans (2004), Overholt (2004) and Stafford (2005) express that the standard for personality metrics is the MBTI. While there is criticism from some that this test oversimplifies typing, it remains the most common and well known of all tools of this type in use today (Evans, 2004; Pepper, 2005; Stafford, 2005).

Incident Management Teams appear as a particular opportunity to find a correlation between positions and personality preferences because the job qualification and descriptions are



very specific (FIREScope, 2004; SAMCG, 2005). In addition, there is a large gap in experienced fire service personnel to fill the roles required in teams at all levels across the country. Borrowing from the public sector, a tool that can streamline selection of individuals with the best opportunity for success is potentially very valuable (Booth, 1999; Cramer, 2006; Pepper, 2005; Stafford, 2005). Additional benefits include the value of personnel and leadership development by helping with the understanding of how personality knowledge can be of a powerful benefit to teams (Hsu, 2004; Riddle, 2006).

### Procedures

Literature review and interviews with experienced Incident Management Team members provided the background for the development of a survey tool. The survey instrument assessed potential discrimination of Myers-Briggs Type Indicator personality traits as selection criteria for specific positions within an IMT. An executive level analysis of all gathered information made recommendations on the feasibility of the use of this tool as part of an assessment and recruitment process for new IMT members.

The MBTI was selected based on information found during the literature review regarding its widespread availability and use (Evans, 2004; Stafford, 2005). Additionally, although very complex to interpret with high accuracy, it is an easily understood tool for the application of assessing the feasibility of a personality tool for team role selection (Overholt, 2004).

The ten question survey was created on SurveyMonkey.com, an internet survey creation tool that provides survey data in spreadsheet form for analysis (Bedrich, 2006; Appendix B). The survey link would be sent out by email to several groups of fire service personnel, looking specifically for those with experience in IMTs or EOCs. IMT positions included were the

Command Staff positions of Liaison Officer, Public Information Officer (PIO) and Safety Officer (FIREScope, 2004). The other IMT positions are the General Staff positions of Incident Commander and Section Chiefs for Operations, Planning, Logistics and Finance (FIREScope). Because these positions are also filled in Emergency Operations Centers (EOCs), the question was broadened to include participants from EOCs to hopefully get more participants. The survey would be sent to some email distribution groups in Texas but also to lists in California in an attempt to tap in to the IMT experience of the fire service in that state.

A limitation of this distribution method was that there was no way to know how many experienced IMT/EOC personnel were reached and did not respond. However demographic questions were asked to ensure there were a variety of different sized agencies and experienced team members in all IMT positions represented in the response (Appendix B).

Questions included demographic information, such as rank, agency size and IMT/EOC experience, and then moved on to questions about MBTI personality typing (Appendix B). Survey participants were asked if they knew their own MBTI; however each was also walked through the four dichotomy pairs with brief descriptions so that they then had an idea of what their preference might be (Appendix B).

The limitation to this is that this crafted type was based on only four questions and not a professionally administered exam. But the objective was to see if there was any potential for matching personality types to individual IMT positions and to introduce the participant to MBTI typing as necessary. The labels for each of the sixteen personality types were intentionally not used so that respondents would not be biased by preconceived notions that could match these labels to a specific IMT position.

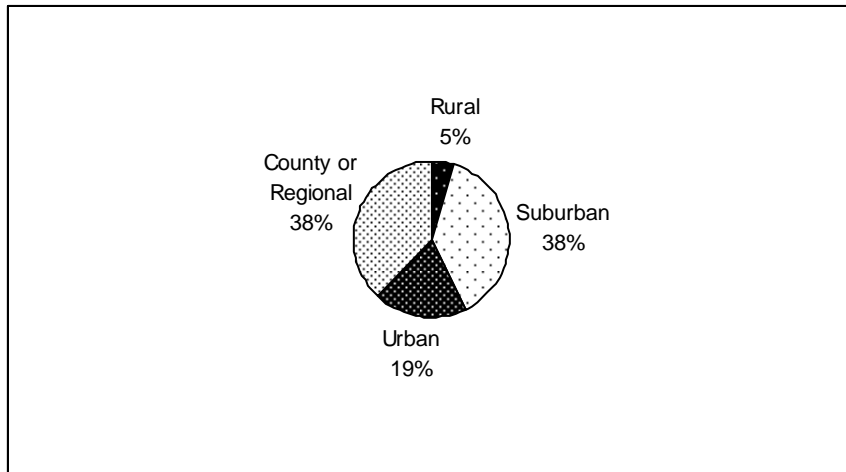
The final question was an elaborate query that produced a matrix of information for analysis (Appendix B, question 10). Each participant was briefly reminded of the preferences associated with each of the four pairs of attributes. They then had a list of all of the eight IMT positions, and were to make a decision from the pair for each attribute. As an example they were asked, for each of the IMT positions, whether the “Best Attribute for Interaction” (Appendix B) was for them to be an Extrovert or an Introvert. The other questions asked the “Best Decision Making Attribute” (Judging or Perceiving), “Best Perception Attribute” (Sensing or Intuition) and “Best Organization Attribute” (Thinking or Feeling) (Appendix B). The last question had them numerically rank the eight IMT positions in the order of their personal preference for the position (Appendix B).

The online survey was piloted by a small group of experienced fire and IMT officers through the SurveyMonkey website. Based on their input, small formatting changes were made; then the pilot results were deleted and the survey link was sent out with an explanatory message. There was a deadline for participation, with the intent to encourage those who received the email and were in the target group to fill out the survey immediately. At the end of the survey period, the report for the responses was downloaded for analysis (Appendix C).

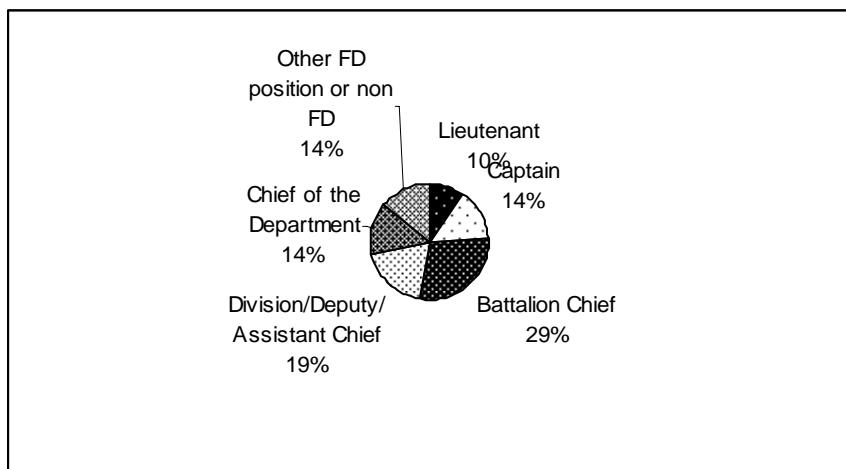
## Results

The literature review and the survey developed from this information produced results that were able to address the research questions posed at the beginning of this process. The targeted email explanation successfully provided excluded survey responses from individuals who had neither IMT nor EOC experience; however the downside was that there were only 36 total responses. This is clearly a limitation; however demographics were balanced, so an analysis of the relationship between the MBTI types and the eight IMT positions was done. This

demographic information looked at type of department and rank to assure a better potential sample, even with a small number of responses.



*Figure 2.* Survey Responders by Department Type (Appendix C)



*Figure 3.* Survey Responders by Department Rank (Appendix C)

While the Rural responders had little representation and the rank of firefighter did not have any, this would be expected from a focused survey on experienced IMT personnel. Other than those two areas, the remaining categories appear balanced. Much of the remaining portions of the survey were used in the assessment of the research questions.

*What personality trait assessment tools are available to type fire department personnel?*

The review provided a wealth of information, not only about available tools, but about personality assessment as a ballooning profession relevant to the assessment of fire department team members. Out of the dozens of tools available, the tool necessary for this project needed to assess normal personalities to understandably categorize them to potentially discriminately match to the eight positions of the Incident Management Team (IMT) (Antonellis, 2006; Hsu, 2004; Pepper, 2005; Stafford, 2005).

The personality assessment that was most suitable for the purposes of this ARP was the Myers-Briggs Type Index (Stafford, 2005; see also Hsu, 2004; Myers & Briggs, n.d.; MBTI, n.d.; Overholt, 2004). This decision was based on the widespread availability and familiarity of this tool for personality typing, as well as the emphasis on the types as preferences rather than labels. In addition, the wealth of information regarding the MBTI instrument makes it easily understood and applied by a layperson on a cursory level. These interpretations include descriptive titles that aided in the correlation of the IMT positions with specific personality types in an easily understood manner (Appendix A).

*Are any of the traits within a tool selectively matched to known abilities for the IMT General and Command Staff positions by experienced IMT members?*

Survey information provided great insight into this question. The MBTI has four dichotomies of preferences that are combined to provide sixteen preferences or types (MBTI, n.d.; Myers-Briggs TI, n.d.). The first pair references a preference for the individual's attitude: the opposite ends of this scale are Introversion and Extroversion. The Extrovert is energized by interaction with the world around them and the Introvert is energized by inward reflection and time alone (MBTI, n.d.).

The perceiving pair is Sensing and Intuition, and refers to a preference for receiving data. The Sensing type pays attention to details and current realities, while the Intuition type prefers to receive their data by paying attention to meanings, patterns and future possibilities (MBTI, n.d.). The judging pair makes decisions using input from their Sensing or Intuition preference; however the decision process is either Thinking or Feeling. Thinking types use principles and logical consequences to decide, while Feeling types choose based on values and consequences for people. Extroversion and Introversion will affect the sources of Thinking/Feeling decision input (MBTI, n.d.).

Judging and Perceiving are the most complex pairing, and can reveal the specific attitude for all of the functions. Simply stated however, the Judging type likes to come to conclusions quickly and enjoys reaching closure, while the Perceiving type likes to enjoy the process and may remain open-ended (MBTI, n.d.).

Each respondent to the survey was asked to select what they felt was the most suitable preference for each of the pairs. To avoid any confusion, these were asked in four separate questions, with all eight of the IMT positions listed in each question (Appendix B). The four responses for each IMT position was calculated to determine what these experienced team members felt was the preferred trait for each (Appendix C). With only 36 responses, any difference of less than 10% was considered a tie, and both preferences were represented by having two types listed (Appendix C). This occurred for only two positions: The Operations and the Planning Section Chiefs. One position had virtual ties for two of the pairs, resulting in four types. Interestingly, this was the Liaison Officer, a position which involves developing relationships with a wide variety of resources both within and outside of the IMT unit.

### *Incident Commander*

The Incident Commander position clearly was defined by the respondents as an ESTJ (Extrovert/Sensory/Thinking/Judging). Results for each trait were consistently high in favor of this type, represented at 92%/70%/78%/78% (Appendix C). This is much higher than the percentage of this type in the general population, with 16% of all men and 11% of all women as ESTJs (Appendix A).

Simply described, this is an individual who thrives upon interaction with others and the world around him or her, who best perceives this world in detail and current reality. This Incident Commander will make decisions using principles and logical consequences to reach quick, decisive conclusions. These are clearly necessary for the highest authority of overall management at an incident site or in an EOC (FIREScope, p. 5-3).

Interestingly, this match deserves more than just a cursory nod. Persons of this type are called “the Guardian” or “the Administrator” (Appendix A). Other descriptive phrases are that they are able to make the tough calls and do not tolerate laziness. They thrive on order and continuity, as well as the organization and supervision of people and activities. Like in the fire service, tradition is important to them, and they see service as an expression of responsibility. This description is spot on what an IMT would want in their Incident Commander.

### *Safety Officer*

ESTJ was also the type strongly associated with the Safety Officer, with survey results at 100%/80%/85%/85% (Appendix C). Ultimately responsible for the safety of all working at an incident (FIREScope, p. 5-7), this position also is one that can not shirk the difficulty of making hard and sometimes controversial decisions. A position that should also not tolerate laziness, service as this Officer must be one focused on the responsibility of keeping the safety of

those present as their top priority and can use emergency authority to stop any potentially unsafe actions (p. 5-7; Appendix A).

### *Operations Section Chief*

The Operations Section Chief is responsible for all of the tactics and procedures to meet the primary mission and mitigate the incident (FIREScope, p. 7-3). Extroversion, Thinking and Judging were high for this section chief, with percentages at 96%/86%/100%; however the perception attribute was a 55%/45% statistical tie where the Sensing function had a slight edge (Appendix C). This means that the Operations Chief will balance perception from their five senses for details and current realities, with subconscious input from their insight to pay attention to meanings, patterns and future possibilities (Appendix A). For an Operations Chief who has to understand the subtleties of their tactics on the incident to possibly adjust those tactics to new threats, the ability to forecast possibilities would be a bonus.

So in addition to the labels of “Guardian” and “Administrator”, the “Field Marshall” for the ENTJ can be added to the description of the Ops Chief (Appendix A). At only 6% of males and 4% of females in the general population, it is a less common trait than that of the Administrator (Appendix A). And like the Operation Section Chief’s other closely related trait ESTJ, the Field Marshall has a natural tendency to assume control of groups. Especially interesting is that they require little encouragement to make a plan and are frank, decisive leaders in activities, often on behalf of others. Another valuable trait for the commander in the field operations area, they are described as “not one to be trifled with.” (Appendix A). They may appear more confident than their experience, but the Operations Chief should not show fear. They are also described as being good at anything requiring reasoning and intelligent talk



*Logistics Section Chief*

The Logistics Chief has the responsibility of providing facilities, services and materials for an incident at the right place and the right time (FIREScope, p. 9/3). The type preference associated by the survey for this position was ESTP: Extroversion/Sensing/Thinking/Perceiving. The statistics supporting this preference, found in 16% of men and 11% of women, were 71%/65%/90%/70% (Appendix A; Appendix C). The preference different from that of the Incident Commander, and different to all of the IMT positions discussed to this point, is that of the decision making attribute.

The Logistics Chief decision making preference selected in the survey was that of Perceiving instead of Judging. This means that rather than coming to quick, decisive conclusions, the Perceiving Logistics Chief likes to take more time to gather information (in this case looking for facts found through their senses from the environment around them) while embracing the process and sometimes leaving a situation open-ended (Appendix A). Because the Logistics Chief is one that would be effective using processes to keep people and resources flowing within an incident, and the ability to keep the process open-ended would help keep the logistics process flexible.

The label associated with the Logistics Chief and the ESTP type is “the Doer” or “the Promoter” (Appendix A). Other attributes, many of which seem particularly suited to this position, include that they are good at on-the-spot problem solving and are spontaneous and active. They dislike long explanations. They are drawn to activities involving “great power” (Appendix A) and have a natural drive to best the competition, a trait that will have them finding ways to better processes and to try to be one step ahead of the needs of the incident. This results

in a lot of confidence, and it has been said that they might say “if I was any better, I couldn’t stand it.” (Appendix A).

### *Planning Section Chief*

The Planning Chief shares the Sensing, Thinking and Perceiving preferences with the Logistics Chief (Appendix C). This ensures that they are likely to perceive information plausibly from details and current realities, while using principles and logic to decide on a course of action. Like the Logistics Chief, they will also take more time to gather facts and can also leave situations open-ended while they stay ready to take the reins back as a situation evolves (Appendix A). This is extremely useful for the position that is responsible for collecting information and then evaluating, disseminating and using it to understand what is going on and planning for predicted possible events (FIREScope, p. 8-5-8.6).

However, unlike any position discussed to this point, the Planning Chief had a virtually tie for the attitude preference at 55% to 45% leaning slightly toward Introversion, but essentially balanced in their attitude for interaction (Appendix C). This provides a balance drawing their strength and energy from the world around them and from inward reflection. The STP survey preferences were at 67%/81%/71% (Appendix C).

This also means that added to the Doer/Promoter of ESTP are the slightly preferred ISTP labels of “the Expeditor” and “the Mechanic” (Appendix A). Descriptions of this attitude preference include the characteristic of being mechanical, rather than artistic, performers. They may look disorganized and hectic, but are more competent and controlled than they appear (Appendix A). There are a couple of specific references to tendencies of firefighters; one is that this preference can find humor in tense situations, so they may be labeled as thick-skinned or tasteless. The other is that working as paramedic or firefighter fulfills the need of this type to

live on the edge. Finally, it is said that they are best in a crisis, but may use natural disregard for roles and authority to focus and tackle emergencies in the most effective way.

#### *Finance/Administration Section Chief*

The Finance/Administration Section Chief shared the Introversion, Sensing, Thinking and Perceiving preferences that were part of the Planning Section, but with the interaction attribute heavily weighted to Introversion. The ISTP statistics for the Finance Chief were 85%/74%/89%/63% (Appendix C). In the general population, this preference combination is only found in 6% of men and 4% of women (Appendix A).

The labels again for the ISTP type were the Expeditor and the Mechanic (Appendix A). The Finance Chief is responsible for tracking the costs associated with an incident in association with all of the other Section Chiefs to be able to correctly account for funds spent to prepare for possible reimbursement or budget analysis (FIREScope, p. 10-3). Plusses are the ability to think from a mechanical perspective using the perception of facts along with the organizational attribute of thinking by using principles and logical consequences – musts for accounting and cost analysis functionality (Appendix A). It is interesting to note that this was the only IMT position that was clearly seen to benefit from being an Introvert; also only 22.6% of the survey respondents saw themselves as having an Introversion preference (Appendix C).

#### *Public Information Officer*

The Public Information Officer (PIO) is responsible for providing information about an incident to the media, the public and incident personnel (FIREScope, p. 5-4). This attention to many differing interests outside of the responder community is a unique position within the IMT. The preference combination recommended through the survey was different from any of the other IMT posts other than the complex Liaison Officer (Appendix C). The type recommended

for the PIO was ESFP: Extroversion, Sensing, Feeling and Perceiving with percentages of 86%/60%/60%/60% (Appendix C). This type is also different from the others discussed in the general population so far in that there are slightly more women of this type at 16% than men at 11% (Appendix A).

The labels for this type are “the Entertainer” and “the Performer”; certainly descriptive of someone that has to be comfortable in the limelight (Appendix A). This personality knows what’s going on and joins in easily. They are also great at remembering facts, and stand out best in situations that need sound common sense with people and things – a plus with an individual who may need to think on the fly with the media. Social gatherings are an energy boost for this type, who also loves to talk, another positive with someone that will have to frequently speak to crowds or on media broadcasts (Appendix A).

#### *Liaison Officer*

The Liaison Officer was saved for last because it was the only position that had virtual ties in two of the four attributes. This resulted in four essentially tied preference types: ESFP, ENFP, ESTP and ENTP (Appendix C). The ESFP was shared with the PIO, while the ESTP was shared with both the Logistics and Planning Section Chiefs. This match in the survey makes sense, because the Liaison Officer is the connection with outside Agency Representatives assigned to the incident by assisting or cooperating agencies for all members of the IMT, especially the Incident Commander (FIREScope, p. 5-5). This position helps Logistics acquire the resources they may need from other agencies, and the Planning Section with resources they are anticipating in operational periods further into the incident. The ESFP (the Entertainer/Performer) preference statistics were 80%/53%/53%/79%, with the ESTP (the Doer/Promoter) preferences at 80%/53%/47%/79% (Appendix C).

However the other two types matched to the Liaison Officer, which have not been discussed within other IMT positions, are ENFP and ENTP (Appendix C). In these types, unique in the survey results only to the Liaison Officer, Extroversion, Intuition, Perceiving had preference statistics of 80%/47%/79%, with Feeling at 53% and Thinking at 47% (Appendix C). The labels for the ENFP are “the Inspirer” and “the Journalists” (Appendix A). Additional descriptions of this type preference include that they are idea-people and people-people. They want to help and be admired by other people and have “zany charm” (Appendix A). An especially useful preference for a Liaison Officer is that they usually try to use their social skills and contacts to gently persuade others to their “right” (Appendix A) views. They are assets at brainstorming and improvisation, but are not great at follow-through, boring tasks, and advance preparation.

The ENTP is known as “the Visionary” or “the Inventor” (Appendix A). One of the best attributes of this type for the Liaison Officer is that they will try to do what others say can not be done, and are resourceful in solving new challenges. They are sociable, quick and ingenious, good at many things and are always looking over the next horizon.

What is apparent in the survey about the Liaison Officer is that the preferences were not easily categorized by the IMT members (Appendix C). This could be because of the complexities of the position, but it could also be because the team members may not have a good understanding of this position. Almost half of the respondents had no experience as a Liaison Officer at any level, and only 24% had more than five years of experience at this position (Appendix C, question 3). Also, about half of the respondents had this position ranked fifth or more on their IMT position preference ranking list, also indicating a possible lack of interest or familiarity (Appendix C, question 10).

### *Question Summary*

As a consideration regarding the survey responses related to the second research question, there were only seven of the sixteen types that were represented as preferences for any IMT member; only one of these types was an Introvert, effectively deselecting the other seven Introvert types (Appendix C). Titles of some of the type preferences not determined in the results to be good for any of the IMT positions were “Duty Fulfiller”, “Nurturers”, “Caregivers”, “Artists”, “Idealists” and “Thinkers” (Appendix A). Common traits in these preferences describe people that are overly thoughtful, optimists, romantics and followers (Appendix A). These are qualities to be admired, but not as perceived for the leaders in incident management according to the responses to the survey (Appendix C).

Table 2 shows the IMT positions assessed and the type preference role labels that corresponded to the MBTI type selected by the experienced survey responders.

Table 2

#### *IMT General and Command Staff Positions with Profile Labels*

IMT Position	MBTI Associated Role Labels
Incident Commander	The Guardian and/or the Administrator
Operations Section Chief	The Guardian, the Administrator and/or the Field Administrator
Logistics Section Chief	The Doer and/or the Promoter
Planning Section Chief	The Expeditor, the Mechanic, the Doer and/or the Promoter
Finance/Administrative Section Chief	The Expeditor and/or the Mechanic
Public Information Officer	The Entertainer and/or the Promoter
Safety Officer	The Guardian and/or the Administrator

Liaison Officer	Unique: the Inspirer, the Journalist, the Visionary and/or the Inventor;
	Shared: the Entertainer, the Performer, the Doer and/or the Promoter

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*Note.* Content combined from Appendices A and C.

Again, the responders were not given these labels or the preference types during the survey; to keep them from using the labels to match the positions, they were given each of the four attribute pairs to select the one that seemed to best match the qualities thought useful in the related IMT position. The researcher then compiled the four chosen preferences to complete the MBTI type or types for each position.

The results demonstrated in Table 2, which shows the discriminatory but enlightened responses of experienced team members, are the key to the promise of this theory. In answer to this research question, there was very clear potential for matching personality preferences to the position requirements of the IMT General and Command Staff positions by the experienced IMT members surveyed. There were a low number of survey responses, which could leave some question about the reliability of the survey; however discussion of survey results related to the research questions took questionable areas into account by providing all of the options in the areas under question. In spite of these limitations, the potential as based on these limited results were very specific.

*Is there a correlation between personnel that are credentialed for certain positions and personality traits?*

The low number of responders affected the ability to assess this question accurately from the survey results (Appendix C). The experience in years and in positions was spread out among

the responses; this helps with the assumption that this is a relatively broad response for such a small survey, but it also means that there were only a few responses in each credentialed position. This can not provide any reliable indication of a correlation between credentialed personnel and their personality preferences.

*What potential exists for the use of personality traits as a selection tool for IMT members?*

This question has two components: can personality trait assessment tools work as selection tools, and will these tools work specifically for IMT members. Even though personality tools are more and more commonly used to simplify the hiring selection process for expediency, research was clear that the best use of these tools might be as an educational device to help a person self-select to a particular position (Riddle, 2006; see also Hsu, 2004; MBTI, n.d.; Myers & Briggs, n.d.; Overholt, 2004; Stafford, 2005).

Based on the selective responses to research question two regarding if any of the traits within a tool selectively matched known abilities for the IMT positions by experienced IMT members, there is a very clear potential for the use of personality traits as a tool for IMT members (Appendix A; Appendix C). The IMT positions are different enough that the personality types associated with each of them were discriminatory enough to be usefully selective (FIREScope, 2004; Appendix C). This presents an opportunity to use indicated IMT type preferences in the process of developing IMTs; however again not as a selection tool, but one for self-selection and team-related training.

### Discussion

The idea for using personality typing was germinated in an observation that individuals in certain IMT positions during regional training and exercises seemed to demonstrate the same personality preferences. It could have been that the environment of the IMT created a situation



where these preferences were exhibited during the incident so that the individual would be successful in the position; however another possibility was that these individuals gravitated to positions where they would shine.

The research questions attempted to follow a logical progression to determine, if this was the case, that a personality tool could then be used to select the team members based on their preferences and the match to specific positions.

There were so many potential personality trait assessment tools that could have been used that it was necessary to use popularity, familiarity and availability to select the Myers-Briggs Type Indicator as the tool for addressing the other research questions. There may be other tools more suited, but the MBTI provided a tool that was easily understood by the survey participants; however it is acknowledged that the complexity of interpretation by a professional would provide even better information for the use of the MBTI by the fire service and team selection.

The survey was both a disappointment and a pleasant surprise. The low response numbers were very disappointing, and time limitations did not allow any additional attempts at soliciting more input. However the survey still showed very strong potential because many of the preferences selected were very strongly weighted toward one side or another. And those that were too close to call, especially with such a low response rate, actually provided insight and proved to make sense when compared to the officer responsibility checklists for each position.

These results support the idea that personality preferences may be linked to IMT positions. It would take more information and a more sophisticated survey instrument to find out if there is correlation between personnel that are credentialed for certain positions and their own personality preferences. In the pool of participants, most of those surveyed had no idea what their MBTI was. While the middle questions in the survey gave some insight into what the

participants thought their type could be, it would not be an effective way to follow up on the question of whether personality played a role in the IMT career of these professionals. The limited sophistication of the survey tool also did not lend itself to easily correlate preferences to experience or credentials. This research question is clearly left unanswered.

However the final question about the potential for the use of personality traits as a selection tool for IMT members shows promise. Because of the research, the use of MBTI or another personality assessment tool is probably not the best option for team selection. Although much of corporate America uses the tool for hiring purposes of some type, it makes more sense to use a preference as a point of departure during the application, selection and training process for IMT members. It is sensible because members are more likely already a part of the organization, or at least in the public safety profession; it is also more desirable for an organization to help their employees find the position where they could support their organization by successfully participating in IMTs.

This is where the MBTI, or other tools like it, have great potential. Prospective participants could be given the MBTI, and then have a professional assessment of the results interpreted specifically toward the positions in an IMT. This could help the individual to select the position that they have great potential to be successful in because of their preferences. Alternately it could also be used for the team member who is already in a position or interested in a role that does not match with their preferences; the preference information can help them determine where they may have weaknesses to work on for success. In addition, it could help them select professional development opportunities to strengthen preferences that are determined as desirable for the position they want. Ideally, follow-up would include the suitability for the

individual in the team as assessed over time, and benchmarks could help managers determine success.

Of course, this potential also goes beyond just IMTs. This is why organizations, including those in the fire service, will give the MBTI to their managers during leadership development. It assists the new leader in personal understanding and helps direct growth opportunities. With this in mind, and a correlation between the need for leadership in an organization with that of the vital positions of an IMT, it is logical to use the MBTI for development of incident management leaders as well.

### Recommendations

There is more research necessary to find out to what extent the use of personality tools could be beneficial. Additional study should include survey edits for clarity, and then a much broader solicitation of participation. This could occur by requesting support from organizations such as the forestry service and government organizations responsible for training and supporting teams – especially those at the highest Type I and II levels. A broader response base would also provide much more credibility to the responses.

Additionally it would be appropriate to have the MBTI given to group of experienced Type I and II team members and then crosswalk those preference results to the survey. This would also help validate the survey results for future use, and may provide information that would be useful in the dissemination of these results to potential and new team members. It is necessary to ensure that team members understand the theories about preference so they use the information in a productive way. Education and information about these theories developed by an experienced MBTI facilitator who has received information on how IMTs work would also be critical for success.

Finally, team members receiving the information about their preferences should have a follow-up interview or survey after a specific number of deployments or a certain period of time. This information is critical to ensure that if this program is implemented it is providing useful and relevant information for the participants and that the use of personality preference information for team member development grows in credibility with Incident Management Teams.

The proliferation of IMTs at many levels across the country, many in areas where the formalization of this concept is still very new, has created a situation where persons not very experienced in these teams may be making the decision as to who will be trained to fill these vital roles. Identical to the situations in corporate America where this type of tool is used to streamline selection during a complex process, the fire service can also consider personality tools as a means to assist in selection for critical and specific positions.

For a fire department such as Flower Mound in a small county where multiple organization responses over many operational periods are very uncommon, the use of a tool that could assist with selection and training would be especially beneficial. The fact is that the personnel pool of experienced team members is not large enough, and no one organization in the county has a large enough group, to immediately put an IMT into place for an extended period. The use of this type of tool in the process will allow for inexperienced persons to find a niche where the learning curve may be shorter for them, ultimately providing an effective team in a shorter time with potentially less ongoing struggles to keep them effective.

The results were not conclusive, but this cursory review indicated that there is real potential deserving more research. The possibility of streamlined effectiveness is attractive and promising. This would not only be for ability to simplify the process of supporting good

applicants for these vital IMT positions. Most importantly, any ground that is gained on future incidents with the right persons in the General and Command Staffs as soon as it is practical has the potential for saving lives and property, certainly desired by the Flower Mound Fire Department and the other fire service providers of Denton County, Texas.

## References

- Antonellis, Jr. P. J. (2006, February 1). Burning personalities. *Fire Chief*. Retrieved August 8, 2006, from KeepMedia database.
- Bakker, S. (2000, September) Psychometric tests for personnel selection. *Workplace Today*. Retrieved August 3, 2006, from KeepMedia database.
- Bedrich, L. A. (2006, August 28). *Myers-briggs applied to imt/eoc staff positions*. Survey created and summary retrieved from <http://www.surveymonkey.com>
- Booth, W. S. (1999, May 1). Many are called, but few are chosen. *Fire Chief*. Retrieved August 8, 2006, from KeepMedia database.
- Collins, T. (2005). *Good to great and the social sector: A monograph to accompany good to great*. Boulder, CO: Author.
- Cramer, V. M. (2006, April). Myers-briggs: Celebrate or reevaluate? *Chief Learning Officer*. 5(4), 22.
- Edwards, C. (2003, February 3). QuintZine's Q&A with expert Cory Edwards. *QuintZine*. Retrieved August 1, 2006, from <http://www.quintcareers.com/QuintZine/archives/20040203.html>
- Evans, B. (2004, May 1). Protect yourself from medic cons. *Fire Chief*. Retrieved August 8, 2006, from KeepMedia database.
- FIRESCOPE (2004). *Field operations guide: ICS 420-1*. Riverside, CA: FIRESCOPE.
- Flower Mound (TX) Official Website. (n.d.). *Demographic statistics*. Retrieved March 15, 2006, from <http://flower-mound.com/statistics/statistics.php>
- Hsu, C. (2004, September 20). *The testing of America*. *U S News and World Report*. Retrieved August 20, 2006, from KeepMedia database.

Keirsey temperament versus myers-briggs types. (n.d.). Retrieved August 10, 2006, from

<http://users.viawest.net/~keirsey/difference.html>

Kroeger, O., Thuesen, J. M. & Rutledge, H. (1991). *Type talk at work: how the 16 personality types determine your success on the job* (revised). New York: Bantam Dell.

Life at Disney. (n.d.). Retrieved July 30, 2006, from

<http://corporate.disney.go.com/careers/learning.html>

MBTI proximity chart. (n.d.). Retrieved August 1, 2006, from

<http://www.mrob.com/pub/MBTI-16.html>

Myers & briggs foundation. (n.d.). Retrieved August 1, 2006 from <http://www.myersbriggs.org>

Myers-briggs type indicator [T.I.]. (n.d.). Retrieved August 1, 2006, from Wikipedia database.

North Central Texas Council of Governments. (n.d.). *2006 population estimates*. Retrieved

August 3, 2006, from

<http://www.nctcog.org/ris/demographics/population/2006popestimates.pdf>

Overholt, A. (2004, November 1). Personality tests: Back with a vengeance. *Fast Company*.

Retrieved August 20, 2006, from KeepMedia database.

Paragon learning style inventory. (n.d.) Retrieved August 2, 2006, from

<http://www.oswego.edu/plsi/16TYPE.htm>

Pepper, T. (2005, January 17). Getting to know you. *Newsweek*. Retrieved August 7, 2006,

from KeepMedia database.

Personality type portraits. (n.d.) Retrieved August 1, 2006, from

<http://www.personalitypage.com/portraits.html>

Riddle, D. (2006, September). Myers-briggs: Celebrate or reevaluate response. [Letter to the editor]. *Chief Learning Officer*. 5(9), 12.

Schmitt, J. (2006, March 15). Personality and integrity testing on the rise. *PR Newswire*.

Retrieved August 7, 2006, from KeepMedia, database.

Stafford, D. (2005, May 31). Heads-up hiring. *Kansas City Star*. Retrieved August 8, 2006,

from KeepMedia database.

Southern Area Multi-Agency Coordinating Group. (2005, October 26). *Southern Area Multi-*

*Agency Coordinating Group Announcement/Application*. Atlanta, GA: Southern Area

Coordinating Center.

United States Fire Academy. (2003, September). *Operational policies & procedures/ARP*

*guidelines*. Retrieved June 20, 2006, from

[http://www.usfa.dhs.gov/training/nfa/efop/applied\\_research/](http://www.usfa.dhs.gov/training/nfa/efop/applied_research/)

United States Fire Administration. (n.d.). *Incident management teams frequently asked*

*questions*. Retrieved June 20, 2006, from

<http://www.usfa.dhs.gov/subjects/incident/imt/faq.shtm>



## Appendix A

## MBTI Personality Type Description Matrix

MBTI Types with profile labels and brief descriptions

Type	Profile labels	Descriptions	Male	Fem
ISTJ	Duty Fulfillers, Trustee, Inspectors	Characterized by “we’ve always done it this way”. Punctual; frustrated with inconsistencies of others. Keep feelings to themselves. Steady workers.	6%	4%
ESTJ	Guardians, Administrator	Able to make the tough calls. Thrive on order and continuity, and organization/supervision of people. Like to organize activities. Tradition important; they see service as an expression of responsibility. Laziness not tolerated.	16%	11%
ISFJ	Nurturers, Conservator	These people “need to be needed”. Notoriously bad at delegating. Stable force and good in small-group or one-on-ones; uncomfortable in a supervisory role. Have few close friends and hate confrontation.	4%	6%
ESFJ	Caregivers, Vendor	Generous entertainers. Strong allegiance to rights of seniority. “Hyper-vigilant”; not paranoid but the ability to sense danger all around. “Wear their hearts on their sleeves.”	11%	16%
ISTP	Mechanics, Expeditor	Mechanical, rather than artistic, performers. Need to spread out when working and more competent and controlled than they appear. Find humor in tense situations, so labeled as thick-skinned or tasteless. Working as paramedic or firefighter fulfills need to live on the edge. Best in a crisis, using natural disregard for roles and authority to focus and tackle emergencies in the most effective way.	6%	4%
ESTP	Doers, Promoters	Good at on-the-spot problem solving. Dislike long explanations. Spontaneous and active. Drawn to activities involving “great power”. Natural drive to best the competition; they have gamesmanship. Admires strength in self and others. “If I was any better, I couldn’t stand it.”	16%	11%
ESFP	Performers, Entertainer	Knows what’s going on and joins in easily. Remembers facts easier than mastering theories. Best in situations that need sound common sense with people and things. Social gatherings are an energy boost. Loves to talk.	11%	16%

ISFP	Artists	First to hear the “different drummer”. Lives in the here and now. Fiercely competitive and has trouble losing. Organized education difficult for them. Fantasy oriented. Shuns disagreements. Does not care to lead, but good loyal follower. Relaxed about getting things done.	4%	6%
ENTJ	Executives, Field Marshall	Natural tendency to assume control of groups. Requires little encouragement to make a plan. Frank, decisive leader in activities, often on behalf of others. “Not one to be trifled with.” Good at anything requiring reasoning and intelligent talk. May appear more confident than their experience.	6%	4%
INTJ	Scientists	Original mind and drive for ideas and purposes. Independent and stubborn; needs to cede the battle to win the war. Appear to be self-confident due to knowledge of systems. Always asking “does it work?” Gravitates to positions that show combination of intellect and incisiveness. Personal relationships can be the Achilles heel. Extremely private and sometimes naïve.	2%	1%
ENTP	Visionaries, Inventor	Always looking over the next horizon. Tends to be sociable. Quick, ingenious; good at many things. Resourceful in solving new challenges, but may neglect routine ones. Skillful in finding logical reasons for what they want – and uses finesse to get things done in spite of rules. They try to do what others say can not be done.	6%	4%
INTP	Thinkers, Architect	Quiet and reserved. Often oblivious to the world around them. Have a haunting sense of impending failure, and spend lots of time second guessing themselves. Especially enjoys theoretical pursuits because not confident of their competence in actions. More interested in ideas; little liking for parties and small talk.	2%	1%
ENFJ	Givers, Pedagogue	Responsive and responsible. Can present a proposal or lead a group discussion with ease and tact. Sociable. Responsive to praise and criticism. Believe in their dreams and see themselves as helpers and enablers. Sees the big picture with an expansive focus. “The first shall be last”, showing an open-door policy. Apt to neglect self for needs of others.	4%	6%

INFJ	Protectors, Author	Put their best efforts into their work. Respected for firm principles. There for the cause, not glory. Found in the wake of an emergency rescuing those in acute distress. Poetic justice appealing to them. Suspicious of other's motives; not easily led and rarely fooled. Selective of friends. Real knack for facility in communication.	1%	2%
ENFP	Inspirers, Journalist	Idea-people and people-people. Want to help and be admired by other people. Great deal of zany charm. Usually try to use their social skills and contacts to gently persuade others to their "right" views. Asset in brainstorming, but not at follow-through. Procrastinators about hard deadlines and boring tasks. Often improvise instead of advance preparation.	4%	6%
INFP	Idealists, Questor	See life through rose-colored glasses. Will see the good in almost anyone or anything. Children switch from reality to fantasy and back. Extreme depth of feeling often hidden. Has a sense of failed competence. Can take technical information and put it in laymen's terms.	1%	2%

(Content adapted from MBTI, n.d.; Personality Type, n.d.)

## Appendix B

## Myers-Briggs Applied to IMT/EOC Staff Positions Survey

Section 1: Background and Experience

**Please answer each question related to your experience with Incident Management Teams or in Emergency Operations Centers. You can select more than one answer in this section as applicable.**

1. *Which of the following best describes your department response area?*

Frontier, Rural, Suburban, Urban, County or Regional, State and Federal

2. *What is your current fire department rank?*

Firefighter, Engineer/Apparatus Operator, Lieutenant, Captain, Battalion Chief, Division/Deputy/Assistant Chief, Chief of the Department and other FD position or non FD

3. *Answer the following question related to your experience on Incident Management Teams.*

[Respondents selected a year range in a pull down menu for Years of Experience, Level of Experience, Federal Team, State Team, Type I or II Teams, and Local/Regional Teams.]

Incident Commander, Operations Section Chief, Logistics Section Chief, Planning Section Chief, Finance/Administration Section Chief, Liaison Officer, Safety Officer and Public Information Officer

## Section 2: Myers-Briggs Questions

**If you know your type, please answer questions 6 through 9 based upon that knowledge. Otherwise, use your judgment to select the personality trait that you feel best describes you.**

4. *What is your Myers-Briggs (MBTI) Personality Type?*

[Participants had a choice of “I don’t know” plus all 16 types.]

5. *My dominant personality trait is:*

Extraverted, Introverted, Sensing, Intuition, Thinking, Feeling, Judging and Perceiving

6. *My attitude toward the world around me is that I am:*

Extraverted; I direct energy outwardly and am energized by the outside world.

Introverted; I direct energy inward and am energized by inward reflection.

7. *My interaction with the external world is one of more:*

Judging; I come to conclusions quickly and enjoy the structure provided by reaching closure.

Perceiving; I like to take more time to gather information, enjoy the process, and am more comfortable being open-minded.

8. *My perception ability to gather information is more one of:*

Sensing; I pay attention to details and current realities.

Intuition; I pay attention to meanings, patterns and future possibilities.

9. *My judgment abilities for organizing information and making decisions are more:*

Thinking; I choose decisions based on principles and logical consequences.

Feeling; I choose decisions based on values and consequences for people.

Section 3. Command Staff Questions

10. *Which personality trait do you feel best fits the following IMT/EOC positions?*

*There are two choices in each category for each position.*

*As a reminder:*

*Extraverted: best with outward energy; Introverted: best with inward reflection.*

*Judging: decisive; Perceiving: process oriented.*

*Sensing: uses detail and reality; Intuition: uses trends and the future.*

*Thinking: uses logic and principles; Feeling: uses value and consequences.*

*The last column asks you to rank each position from 1 to 8 in order of your personal preference to fill that role in an IMT/EOC.*

*Thank you very much for your time and expertise.*

[For each position, respondents were asked to select the Best Attribute for

Interaction, the Best Decision Making Attribute, the Best Perception Attribute, the

Best Organization Attribute and the Ranked Personal Preference of Positions.]

Incident Commander, Operations Section Chief, Logistics Section Chief,

Planning Section Chief, Finance Section Chief, Liaison Officer, Safety Officer

and Public Information Officer.